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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,563	09/12/2000	Gregory L. Slaughter	5181-64900	6903

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EXAMINER

BRANCOLINI, JOHN R

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/660,563

Applicant(s)

SLAUGHTER ET AL.

Examiner

John R Brancolini

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This Action in response to Amendment received July 7, 2004. Claims 1-30 still pending in the application.

Specification

The objection to the Abstract is withdrawn by examiner due to amendment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7-13, 17-23, 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg et al. (European Patent 0892530), hereinafter referred to as Rosenberg.

In regards to claim 1, Rosenberg discloses a method comprising:

- A client reading an advertisement from a space (a server multicasts an advertisement to a group which includes a client, see figure 1 for a representation of the group including a client, see also col 3 lines 46-50), wherein the space comprises a network-addressable storage location, wherein the advertisement comprises a Uniform Resource Identifier (URI) and a schema,

wherein the URI specifies a network address at which a service may be accessed, and wherein the schema specifies one or more messages usable to invoke one or more functions of the service (a service broker acts as a medium between the client and the server, utilizing a certain URL for identification purposes. The service broker broadcasts the advertisement with a schema with matching requirements for linking a client and a server, including methods for the client to contact the service broker for information, col 5 line 38 to col 6 line 8).

- The client sending a first message to the service at the URI, wherein the first message is specified in the schema (the client can respond to the criteria set forth in the schema to the service broker which processes the request, col 5 lines 38-45).

In regards to claim 2, Rosenberg discloses the service sending a second message to the client in response to the client sending the first message to the service, wherein the second message is specified in the schema (Figure 2 shows a flow chart of the transmission of messages, after the client contacts the directory agent for information on services as stated in the initial schema message, the directory agent searches for appropriate services, and responds to the client in step 7, see also col 7 lines 1-21).

In regards to claim 3, Rosenberg discloses invoking one or more functions of the service in response to the client sending the first message to the service (once a client

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responds, a search is done by the agent in order to match the client up with the most appropriate service providers, col 7 lines 1-21).

In regards to claim 7, Rosenberg discloses the URI comprises an Internet address (col 6 lines 2-4 shows the broker using an internet address).

In regards to claim 8, Rosenberg discloses the service publishing the advertisement in the space (a server multicasts an advertisement to a group in a space, see col 3 lines 46-50).

In regards to claim 9, Rosenberg discloses the client using a lookup service to find the advertisement in the space (the client replies to the broker which acts as a lookup service to find a server with appropriate services, col 6 line 57 to col 7 line 21).

In regards to claim 10, Rosenberg discloses the client using the URI and the schema in the advertisement to construct a gate for access to the service the client is operable to use the URI and the schema in the advertisement to construct a gate for access to the service (after receiving the advertisement with the URI and the schema, the client responds with a message which creates a gate between the client and the broker for communication of the services, figure 2 steps 5-10, also col 5 lines 38-55, col 6 line 57 – col 7 line 21).

In regards to claim 11, Rosenberg discloses a system comprising:

- A client (figure 1 shows a client).
- A service which is communicatively coupled to the client (figure 1 shows a server coupled to the client).
- A space which is communicatively coupled to the client, wherein the space comprises a network-addressable storage location, wherein the space stores an advertisement for the service (a server multicasts an advertisement to a group which is displayed in network-addressable space, see col 3 lines 46-50), wherein the advertisement comprises a Uniform Resource Identifier (URI) and a schema, wherein the URI specifies a network address at which the service may be accessed, and wherein the schema specifies one or more messages usable to invoke one or more functions of the service (a service broker acts as a medium between the client and the server, utilizing a certain URL for identification purposes. The service broker broadcasts the advertisement with a schema with matching requirements for linking a client and a server, including methods for the client to contact the service broker for information on certain services, col 5 line 38 to col 6 line 8).
- Wherein the client is operable to:
 - o Read the advertisement from a space (a server multicasts an advertisement to a group which includes a client, see figure 1 for a representation of the group including a client, see also col 3 lines 46-50).

- o Send a first message to the service at the URI, wherein the first message is specified in the schema (the client can respond to the criteria set forth in the schema to the service broker, at the broker's determined address space, the broker then processes the request, col 5 lines 38-45).

In regards to claim 12, Rosenberg discloses the service is operable to send a second message to the client in response to the first message, wherein the second message is specified in the schema (Figure 2 shows a flow chart of the transmission of messages, after the client contacts the directory agent for information on services as stated in the initial schema message, the directory agent searches for appropriate services, and responds to the client in step 7, see also col 7 lines 1-21).

In regards to claim 13, Rosenberg discloses one or more functions of the service are invoked in response to the first message (once a client responds, a search is done by the agent in order to match the client up with the most appropriate service providers, col 7 lines 1-21).

In regards to claim 17, Rosenberg discloses the URI comprises an Internet address (col 6 lines 2-4 shows the broker using an internet address).

In regards to claim 18, Rosenberg discloses the service is operable to publish the advertisement in the space (a server multicasts an advertisement to a group in a space, see col 3 lines 46-50).

In regards to claim 19, Rosenberg discloses the client is operable to use a lookup service to find the advertisement in the space (the client replies to the broker which acts as a lookup service to find a server with appropriate services, col 6 line 57 to col 7 line 21).

In regards to claim 20, Rosenberg discloses the client is operable to use the URI and the schema in the advertisement to construct a gate for access to the service (after receiving the advertisement with the URI and the schema, the client responds with a message which creates a gate between the client and the broker for communication of the services, figure 2 steps 5-10, also col 5 lines 38-55, col 6 line 57 – col 7 line 21).

In regards to claim 21, Rosenberg discloses a carrier medium comprising program instructions, wherein the program instructions are computer-executable to implement:

- A client reading an advertisement from a space (a server multicasts an advertisement to a group which includes a client, see figure 1 for a representation of the group including a client, see also col 3 lines 46-50), wherein the space comprises a network-addressable storage location, wherein the

advertisement comprises a Uniform Resource Identifier (URI) and a schema, wherein the URI specifies a network address at which a service may be accessed, and wherein the schema specifies one or more messages usable to invoke one or more functions of the service (a service broker acts as a medium between the client and the server, utilizing a certain URL for identification purposes. The service broker broadcasts the advertisement with a schema with matching requirements for linking a client and a server, including methods for the client to contact the service broker for information, col 5 line 38 to col 6 line 8).

- The client sending a first message to the service at the URI, wherein the first message is specified in the schema (the client can respond to the criteria set forth in the schema to the service broker which processes the request, col 5 lines 38-45).

In regards to claim 22, Rosenberg discloses the service sending a second message to the client in response to the client sending the first message to the service, wherein the second message is specified in the schema (Figure 2 shows a flow chart of the transmission of messages, after the client contacts the directory agent for information on services as stated in the initial schema message, the directory agent searches for appropriate services, and responds to the client in step 7, see also col 7 lines 1-21).

In regards to claim 23, Rosenberg discloses invoking one or more functions of the service in response to the client sending the first message to the service (once a client responds, a search is done by the agent in order to match the client up with the most appropriate service providers, col 7 lines 1-21).

In regards to claim 27, Rosenberg discloses the URI comprises an Internet address (col 6 lines 2-4 shows the broker using an internet address).

In regards to claim 28, Rosenberg discloses the program instructions are further computer-executable to implement the service publishing the advertisement in the space (a server multicasts an advertisement to a group in a space, see col 3 lines 46-50).

In regards to claim 29, Rosenberg discloses the client using a lookup service to find the advertisement in the space(the client replies to the broker which acts as a lookup service to find a server with appropriate services, col 6 line 57 to col 7 line 21).

In regards to claim 30, Rosenberg discloses the client using the URI and the schema in the advertisement to construct a gate for access to the service (after receiving the advertisement with the URI and the schema, the client responds with a message which creates a gate between the client and the broker for communication of the services, figure 2 steps 5-10, also col 5 lines 38-55, col 6 line 57 – col 7 line 21).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6, 14-16, 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosenberg in view of Brown et al. (US Patent 6658415), hereinafter referred to as Brown.

In regards to claims 4, 14, and 24, Rosenberg discloses all the limitations of claims 1, 11, and 21, but fails to disclose the schema is expressed in a data representation language.

Brown discloses a system for monitoring and managing user access to online content. In this system, Brown discloses expressing data transfer file, such as document type definitions, as well as schema expressions in XML, which is a data representation language (see col 5 lines 11-24). Brown shows that using a common data representation language in expression of schemas is preferable to use to allow for a universally accessible data structure transmittable to multiple diverse access platforms (col 1 line 64 – col 2 lines 15).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Rosenberg to include expressing a schema in a data representation

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language as taught by Brown to allow for a universally accessible data structure transmittable to multiple diverse access platforms.

In regards to claims 5, 15, and 25, Brown discloses a message is expressed in a data representation language. (a data file is transferred in a message, the file being expressed in XML, or a data representation language, col 5 lines 11-24).

In regards to claims 6, 16, and 26, Brown discloses the data representation language comprises extensible Markup Language (XML) (the data files, as discussed above, are expressed in XML, col 5 lines 11-24).

Response to Arguments

Applicant's arguments received July 7, 2004 have been fully considered but they are not persuasive. Applicant's arguments (paraphrased by examiner):

1. With regards to claims 1 and 2 (and subsequently 11, 12, 21, and 22),
Rosenberg fails to teach the use of a schema, wherein the schema specifies one or more messages usable to invoke one or more functions of the service (remarks, page 3).
2. With regards to claim 10 (and subsequently claims 20 and 30), Rosenberg fails to disclose construction of a gate for access to the service.
3. With regards to the 103 rejects, Brown fails to teach the use of a Schema for providing messages usable to invoke one or more functions of a service.

In regards to argument 1, the examiner respectfully disagrees with applicant. A schema is generally regarded in the art as a database-to-database management system, including defining parameters of the database as well as defining messaging relating to conveyance of this information. The applicant contends that Rosenberg doesn't utilize a schema specifying one or more messages usable to invoke one or more functions of the service. However, though not directly calling it a schema, Rosenberg discloses the broker replies to all client requests with service replies and service type replies. These replies include direct addressing of the servers as well as different services and different requirements of the services. As claimed, the limitation only includes invoking one or more functions of the service. From the disclosed information provided by Rosenberg, the examiner sees a schema which provides one or messages that allows the client to connect to the server (a first function), as well as provides the client with a message containing connection parameters necessary for data exchange with the server (second function).

In response to argument 2, the examiner respectfully disagrees with applicant. As claimed, the examiner is interpreting the claim to read the client utilizes both the URI (or resource identifier, which as seen above is disclosed in the schema) and the schema in the advertisement to construct a gate, or physical connection for access to the service, as gate is being interpreted by the examiner. Utilizing the information contained in the schema, the client receives an address of the service provider which the client then

uses to connect directly to the server, constructing a gate for access. This is most directly seen in FIG. 2 where the broker responds to a request with an address, and the client connects directly to the server, forming a gate.

In response to argument 3, the examiner agrees with applicant. However, Brown is not being used to teach the schema containing messages usable to invoke one or more functions of a service, Brown is being used to teach providing a schema in a data representation language such as XML, which the applicant appears to have agreed with in the Remarks.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

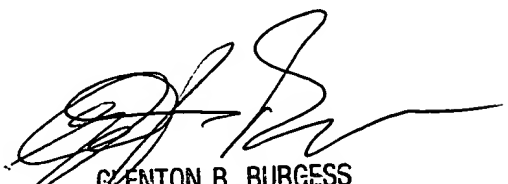
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R Brancolini whose telephone number is (703) 305-7107. The examiner can normally be reached on M-Th 7am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JRB



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